

## Page 1

## Packaging

6x

P.2/04/17

8/12/17

46

©

Sp  
12-04-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 82915****\*82915\***

Page 2

Tuesday, April 10, 2012 3:23:13 PM

Item ID: D4151-043 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Basket Fwd Hardpoint Assembly, Upper  
Start Date: 4/10/2012 Start Qty: 10.00 **\*10\*** Cust Item ID:  
Required Date: 4/20/2012 Req'd Qty: 10.00 **\*10\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00							
<b>*130*</b>									
QC	Memo	0.00							
Quality Control									

12/4/19  
R12-0418

W/O:		WORK ORDER CHANGES					
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**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, April 10, 2012 3:23:18 PM

Page 1

Work Order ID: 82915

\*82915\*

Parent Item: D4151-043

\*D4151-043\*

Parent Item Name: Basket Fwd Hardpoint Assembly, Upper

Start Date: 4/10/2012

Required Date: 4/20/2012

Start Qty: 10.00

Required Qty: 10.00

## Comments:

IPP Rev:A 10.06.24 new issue DD verf:EC

IPP Rev:B 10.07.22 as per revB DD verf:JLM

11.01.21 as per dwg revC DD verf:JLM

IPP Rev:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4151-3		Manufactured	No			100	Each	38.0000	2	20			
*D4151-3*									**				
Upper Hardpoint Plate													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST134		38							
				80738		13							
				82047		25							
D4151-7		Manufactured	No			100	Each	0.0000	1	10			
*D4151-7*									**				
Fwd Eyebolt Receiver (Upper)													
AN4C13A		Purchased	No			100	Each	87.0000	2	20			
*AN4C13A*									**				
BOLT													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST307		82							
				121166		82							
				ST357		5							
				120187		1							
				120423		4							

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, April 10, 2012 3:23:18 PM

Work Order ID: 82915

\*82915\*

Parent Item: D4151-043

\*D4151-043\*

Parent Item Name: Basket Fwd Hardpoint Assembly, Upper

Start Date: 4/10/2012

Required Date: 4/20/2012

Start Qty: 10.00

Required Qty: 10.00

MS21043-4 Purchased No

100 Each 1,691.000 2 20

\*MS21043-4\*

Nut

\*\*

*EP 12/04/17*

Location

Loc Qty

Loc Code

FG	40	
104603	40	
ST301	1651	
119546 -	286	
120308	365	
121162	1000	

*12*

NAS1149C0432R Purchased No

100 Each 5,000.000 4 40

\*NAS1149C0432R\*

Washer

\*\*

*EP 12/04/17*

Location

Loc Qty

Loc Code

ST297	2000	
117291	1000	
119124	1000	
ST298	3000	
121255	3000	

*24*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

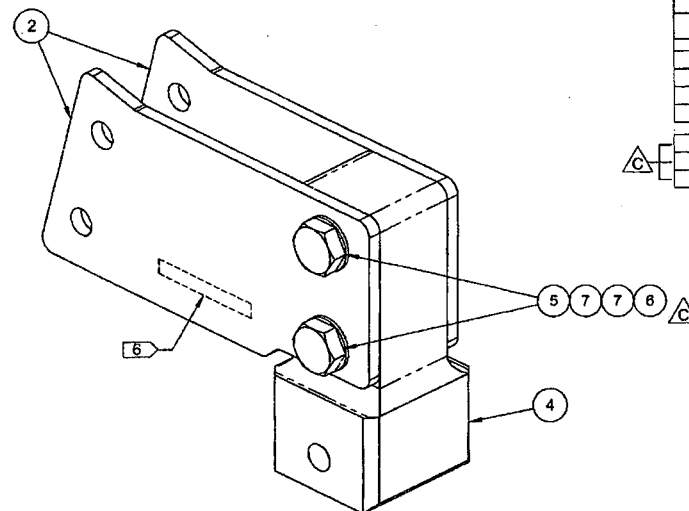
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

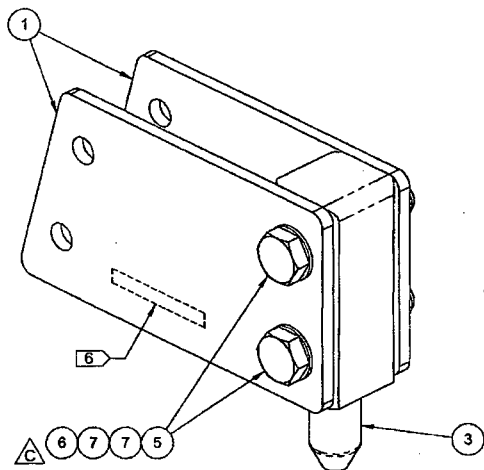
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**NOTE:** Date & initial all entries





**D4151-043 BASKET FWD HARDPOINT ASSY (UPPER)**



**D4151-041 BASKET FWD HARDPOINT ASSY (LOWER)**

- NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4151-04X" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT:
    - D4151-041 = 0.88 lbs
    - D4151-043 = 1.17 lbs

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X		D4151-041	BASKET FWD HARDPOINT ASSY (LOWER)
		X	D4151-043	BASKET FWD HARDPOINT ASSY (UPPER)
1	2		D4151-1	LOWER HARDPOINT PLATE
2		2	D4151-3	UPPER HARDPOINT PLATE
3	1		D4151-5	FWD BASKET INSTL STUD (LOWER)
4		1	D4151-7	FWD EYEBOLT RECEIVER (UPPER)
5	2	2	AN4C13A	BOLT
6	2	2	MS21043-4	NUT
7	4	4	NAS1149C0432R	WASHER

SHOP COPY  
REF: 101  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT: BASKET FWD HARDPOINT ASSY  
WITH NOTICE  
WORK ORDER  
NO. 82915  
P12-04-10

**RELEASED**  
2011-01-18

C	AN4 HARDWARE WAS AN3 (B8-1, C3-1 & D3-1); Ø0.252 WAS Ø0.191 (C5-2, D1-2); TIGHTENED TOL ON 1.000 DIM (C5-2, D1-2, C7-3, C3-3); Ø0.250 WAS Ø0.191 (C6-3, B4-3); 1.83 WAS 1.75 (C1-2), 2.84 WAS 2.78 (B3-3) AND 1.88 WAS 1.80 (C1-3) TO PRESERVE 1 SED. REASON: SEE D407-787 DESIGN JOURNAL	MB	10.12.14
B	ADDED D4151-5/7 (SHT 3); D4151-5 WAS D3911-1 (ZN B6-1 & D3-1); D4151-7 WAS D3911-3 (ZN C4-1 & D3-1) ITEMS #5, 6 & 7 REPLACE MS20815-4M20 (ZN C3-1, D3-1 & B8-1); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN C5-2); Ø0.191 2 PL REPLACES Ø0.129 4 PL (ZN D1-2); REASON: SEE TR-0350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.22
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.12.14		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4151** REV. C  
SHEET 1 OF 3  
TITLE **BASKET FWD HARDPOINT** SCALE NTS

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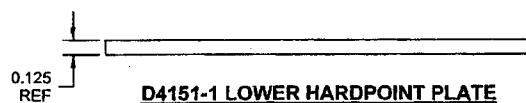
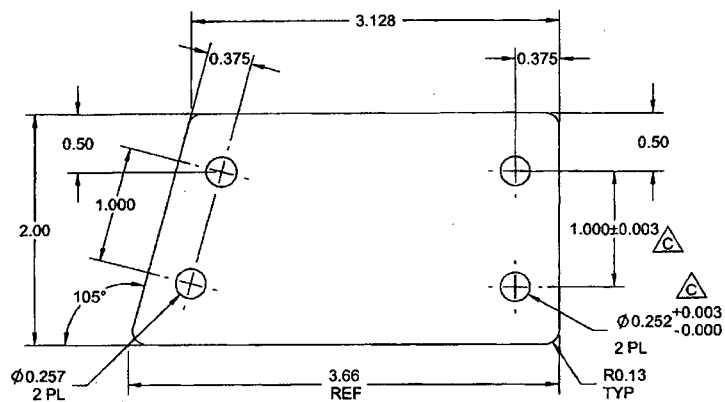
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

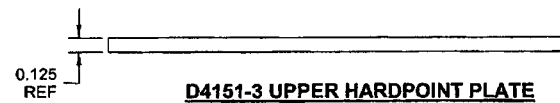
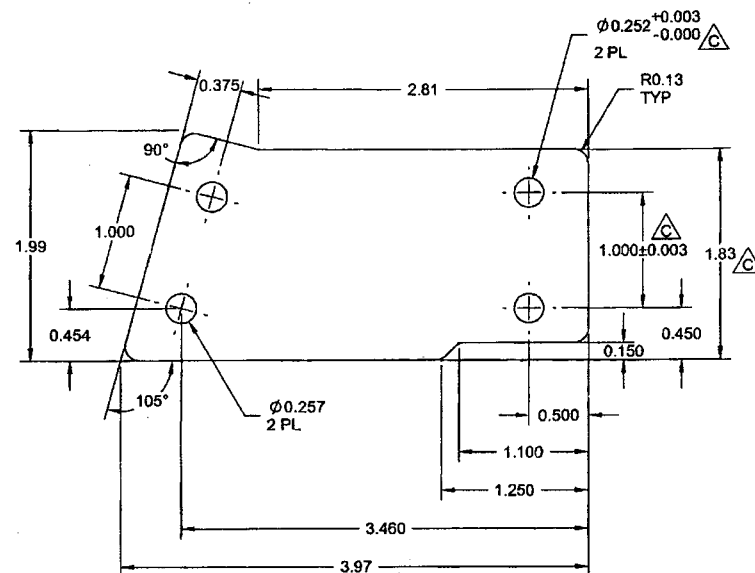
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4151-1 LOWER HARDPOINT PLATE**



**D4151-3 UPPER HARDPOINT PLATE**

**NOTES:**

- 1) MATERIAL: 303/304/316 STAINLESS STEEL SHEET ANNEALED 2B, 0.125 THK  
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240  
REF. DART SPEC. M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT ASSEMBLY
- 7) WEIGHT:  
- D4151-1 = 0.24 lbs  
- D4151-3 = 0.23 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO.	REV. C
MFG. APPR.		<b>D4151</b>	SHEET 2 OF 3
APPROVED	AM	TITLE	SCALE
DE APPR.		<b>BASKET FWD HARDPOINT</b>	NTS
DATE	10.12.14	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

**RELEASED**  
2011-01-18  
MD

82915

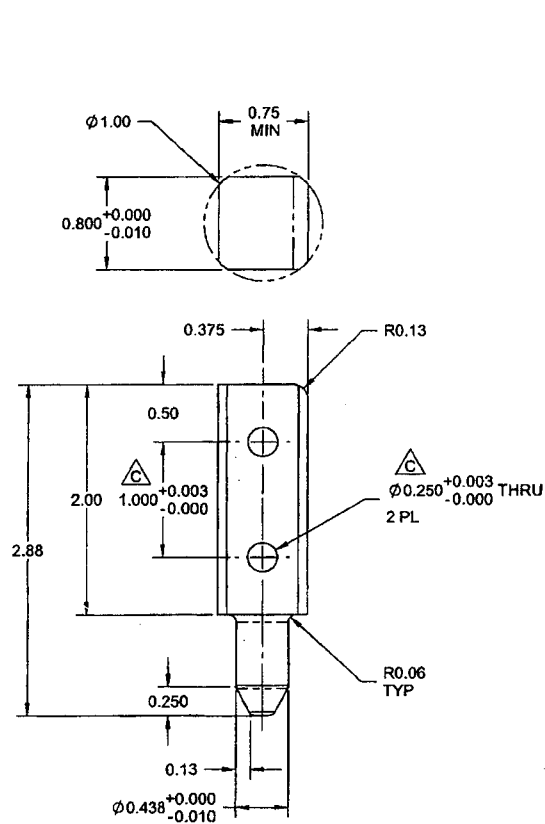
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

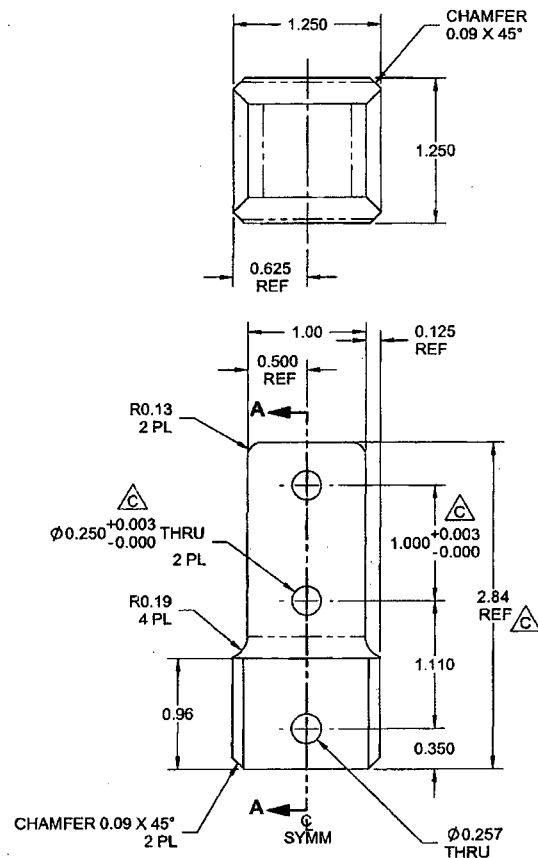
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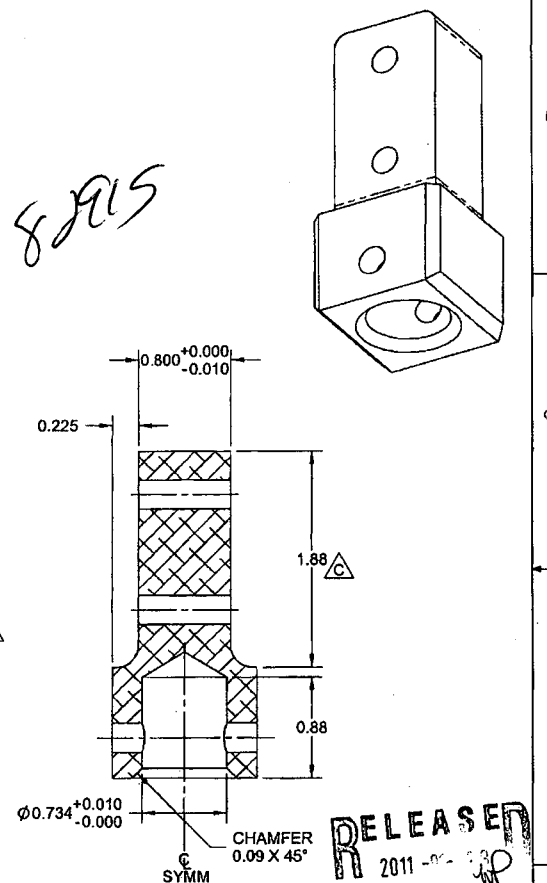
**NOTE:** Date & initial all entries



**D4151-5 FWD BASKET INSTL STUD (LOWER)**



**D4151-7 FWD EYEBOLT RECEIVER (UPPER)**



**SECTION A-A**

- NOTES:
- 1) MATERIAL -5: 303/304/316 STAINLESS STEEL ROUND BAR, PER ASTM A276 OR ASTM A582 PER DART SPEC M303R OR M304R  
-7: 303/304/316 STAINLESS STEEL BAR, PER ASTM A276 OR ASTM A582 PER DART SPEC M303B OR M304B
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY AT ASSEMBLY
  - 7) WEIGHT -5: 0.36 lbs  
-7: 0.70 lbs

DESIGN	JK	<b>DART AEROSPACE LTD</b>	
DRAWN	JK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO. <b>D4151</b>	REV. C
MFG. APPR.	JK	SHEET 3 OF 3	
APPROVED	JK	TITLE <b>BASKET FWD HARDPOINT</b>	SCALE NTS
DE APPR.	JK	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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RELEASED  
2011-05-23  
RELEASED

W/O:		WORK ORDER CHANGES					
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